

How to make **wireless control** your superpower

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Challenges 2024

01 Challenges and opportunities in the industry



Investment in new builds is declining significantly



Lack of skilled staff, particularly installers



Cost of energy remains elevated – greater demand for energy efficiency

How wireless can help you

02 Our products replace the cable



How wireless can help you

THREE INDUSTRY EXAMPLES

Achieve certification for new builds

Faster installation for retrofits

The only solution for heritage buildings

“Huge projects like Økern Portal prove the scalability of WISE and of the underlying technology from LumenRadio. We can also easily cope with the many changes occurring throughout such a large and complex project, thanks to the flexibility provided by having a wireless solution.”

Caroline Jacobsson, Business Development, Swegon.

Swegon WISE Økern Portal, Norway

LARGE-SCALE, RELIABLE, WIRELESS MESH

CERTIFICATION: BREEAM Excellent

NO OF WIRELESS NODES: ca 4 300

80 000m²



Starret Lehigh Building, NY, USA

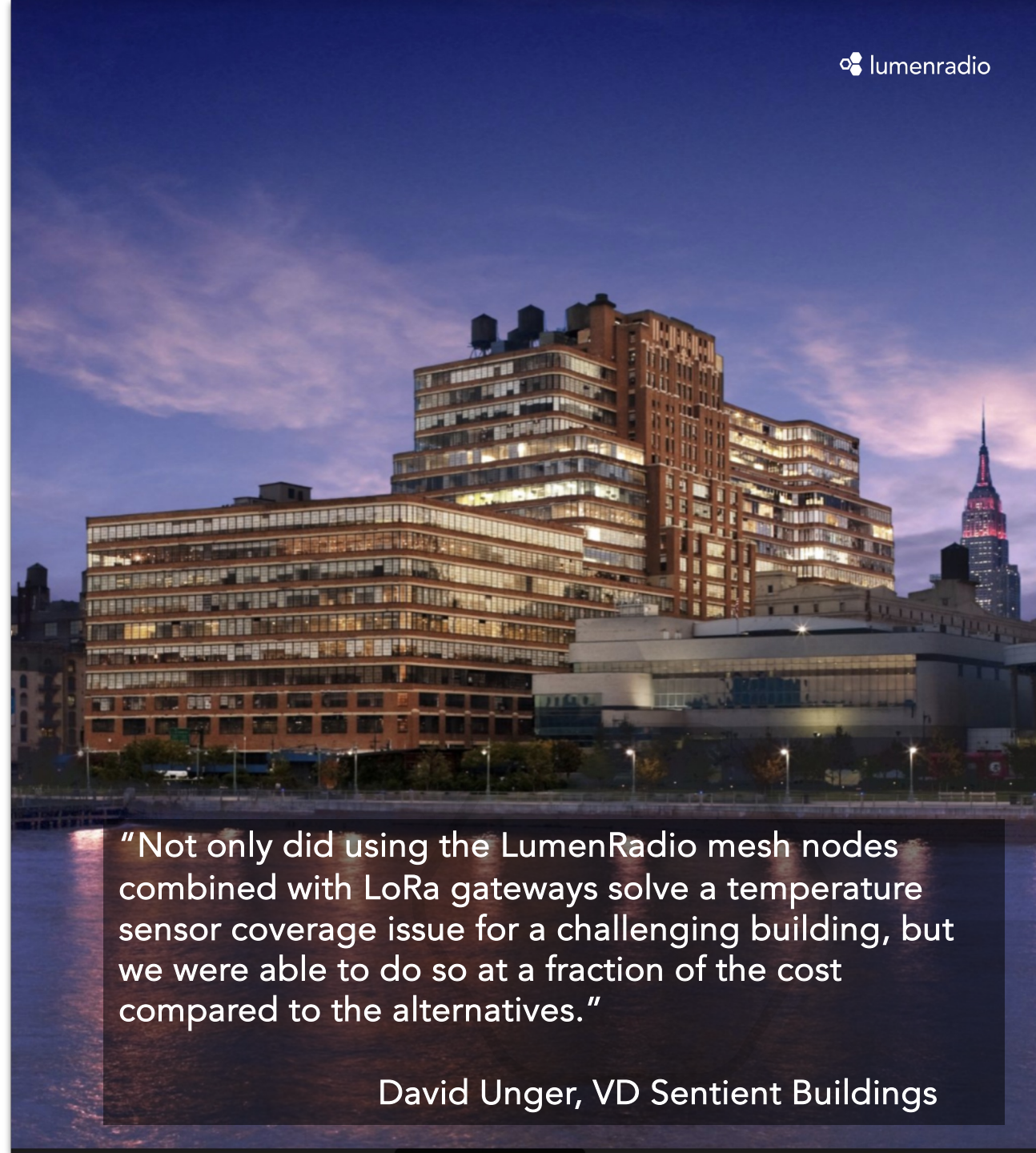
WIRELESS BACNET for heritage buildings

CUSTOMER: Sentient Buildings and RXR Reality, large property owner in New York (e.g. 75 Rockefeller Plaza, 5 Times Square and 230 Park Ave).

CHALLENGE: Find a reliable wireless solution for a building of 200 000 m² in a challenging wireless environment.

SOLUTION: 50 LumenRadio W-BACnet units over 18 floors as a “backbone” for BACnet/LoRa gateway which reached LoRa temperature sensors.

BENEFITS: Significant time and cost savings. A reliable solution which will be reemployed for many other projects. Avoided drilling holes in 1m thick walls.



“Not only did using the LumenRadio mesh nodes combined with LoRa gateways solve a temperature sensor coverage issue for a challenging building, but we were able to do so at a fraction of the cost compared to the alternatives.”

David Unger, VD Sentient Buildings



Case study – Jersey City

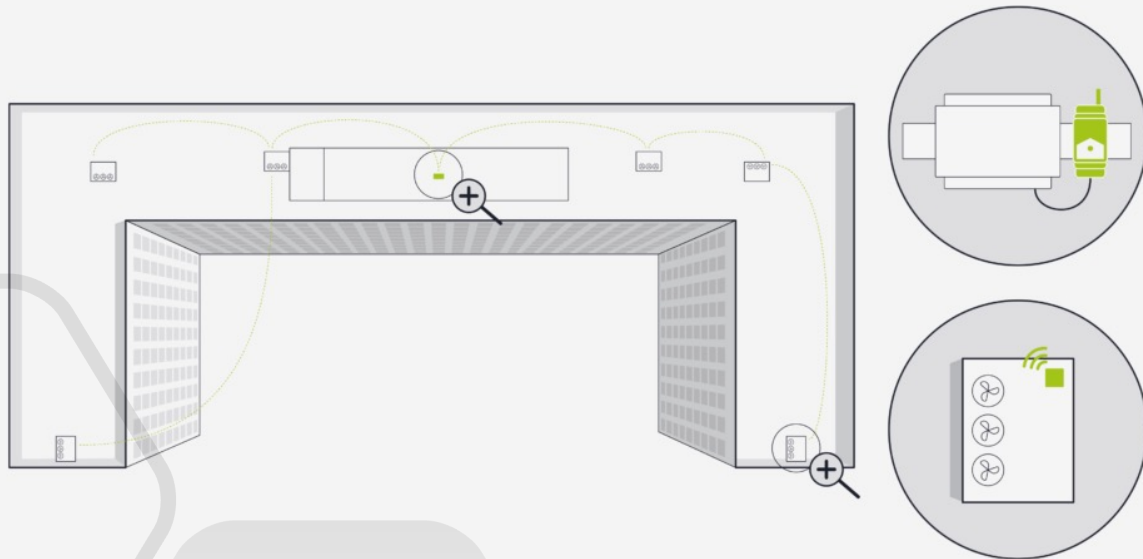
A WEEKS JOB IN 3 HOURS

Partners: KF Mechanical & Broudy Precision.

Challenge: All BACnet nodes inside metal enclosures. Control room has approx. 4 inch metal walls. Cellular antennas create wireless interference.

Solution: W-BACnet device on each RTU and W-BACnet gateway with larger antenna inside control room.

The Benefits: Significant reduction in installation cost and time. Installation and completed in 3 hours. Wired solution would have taken one week.



"LumenRadio's W-BACnet solution save time and cost in our customers' projects - especially when we talk about modernization and retrofit projects in already existing buildings. It works and it solves a real problem."

Frank Witmer, Director of Engineering at Broudy Precision.

Manilla School, Stockholm Campus Konradsberg

LUMENRADIO W-BACNET

- Control room temperature with BACnet MS/TP
- 126 nodes on 5 separate networks
- Important that renovation can be done without disruption the running of the school
- 7 610 m²
- Customer: Kieback & Peter



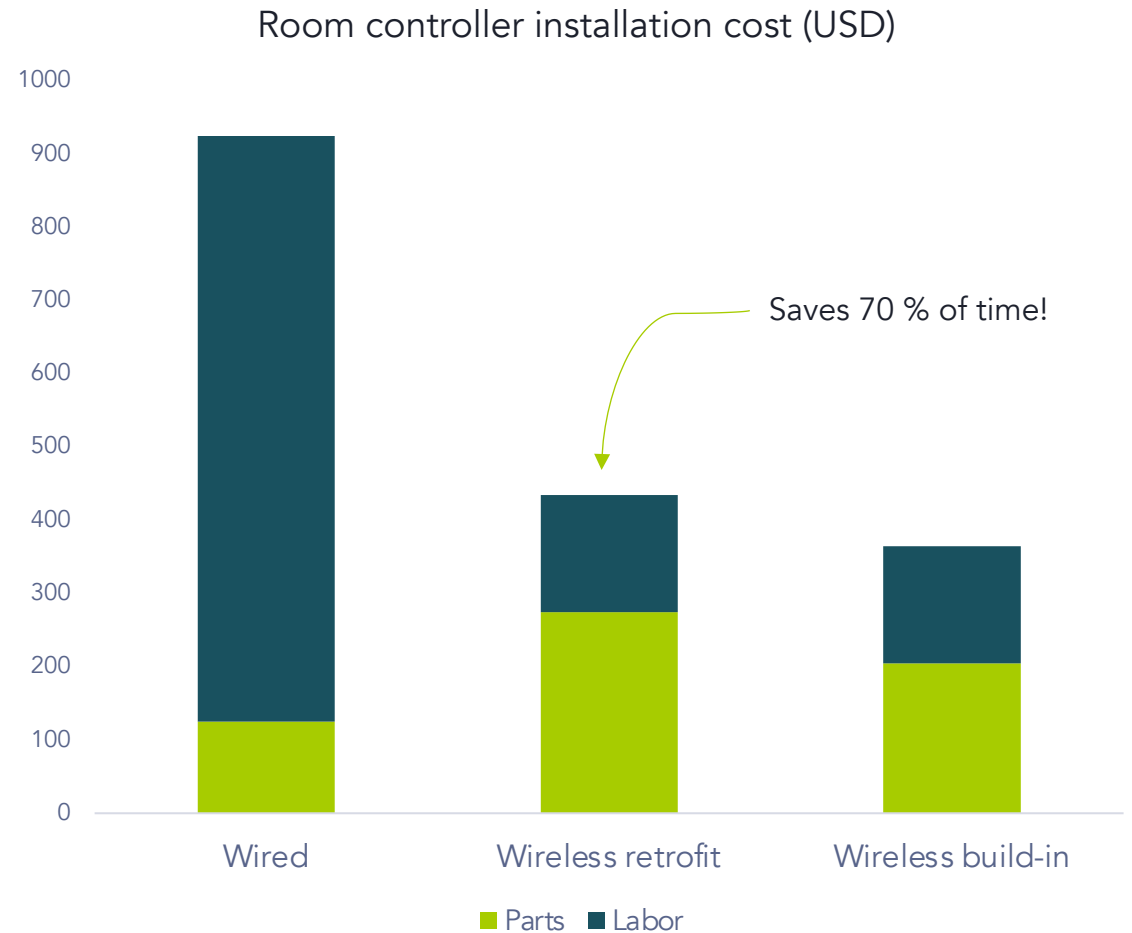
Cost calculator


03

Are you seeing the whole picture?

THE BENEFITS OF WIRELESS BACNET

- Wireless enables control for
 - Installation
 - Commissioning
 - TROUBLE SHOOTING!
- Greater flexibility
 - Installation and renovation
 - New applications
 - New services and offerings





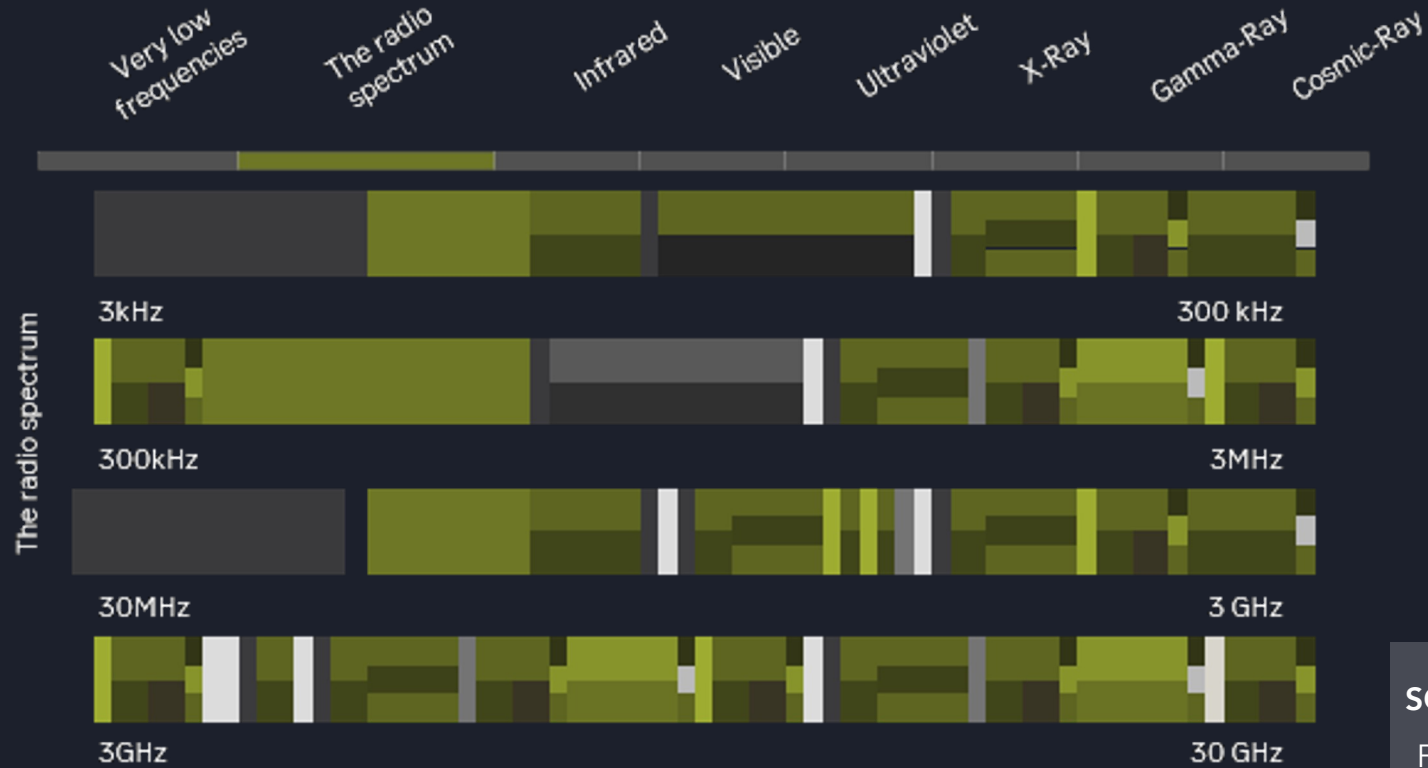
Why it works

WHAT'S LUMENRADIO'S SECRET?

Coachella 2012



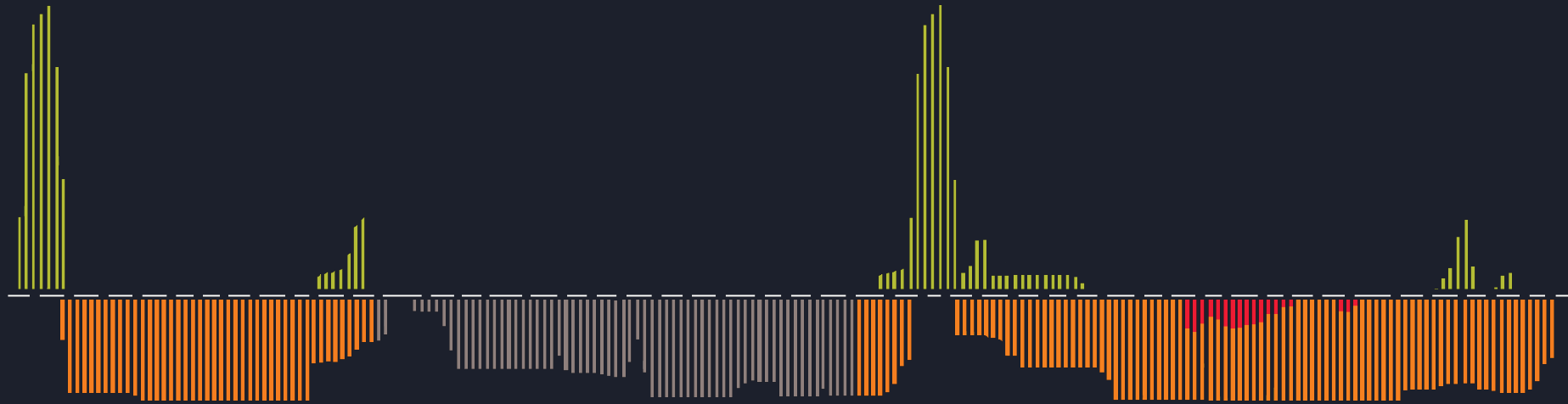
04 Frequency spectrum



SOLVING THE INTERFERENCE OF THINGS

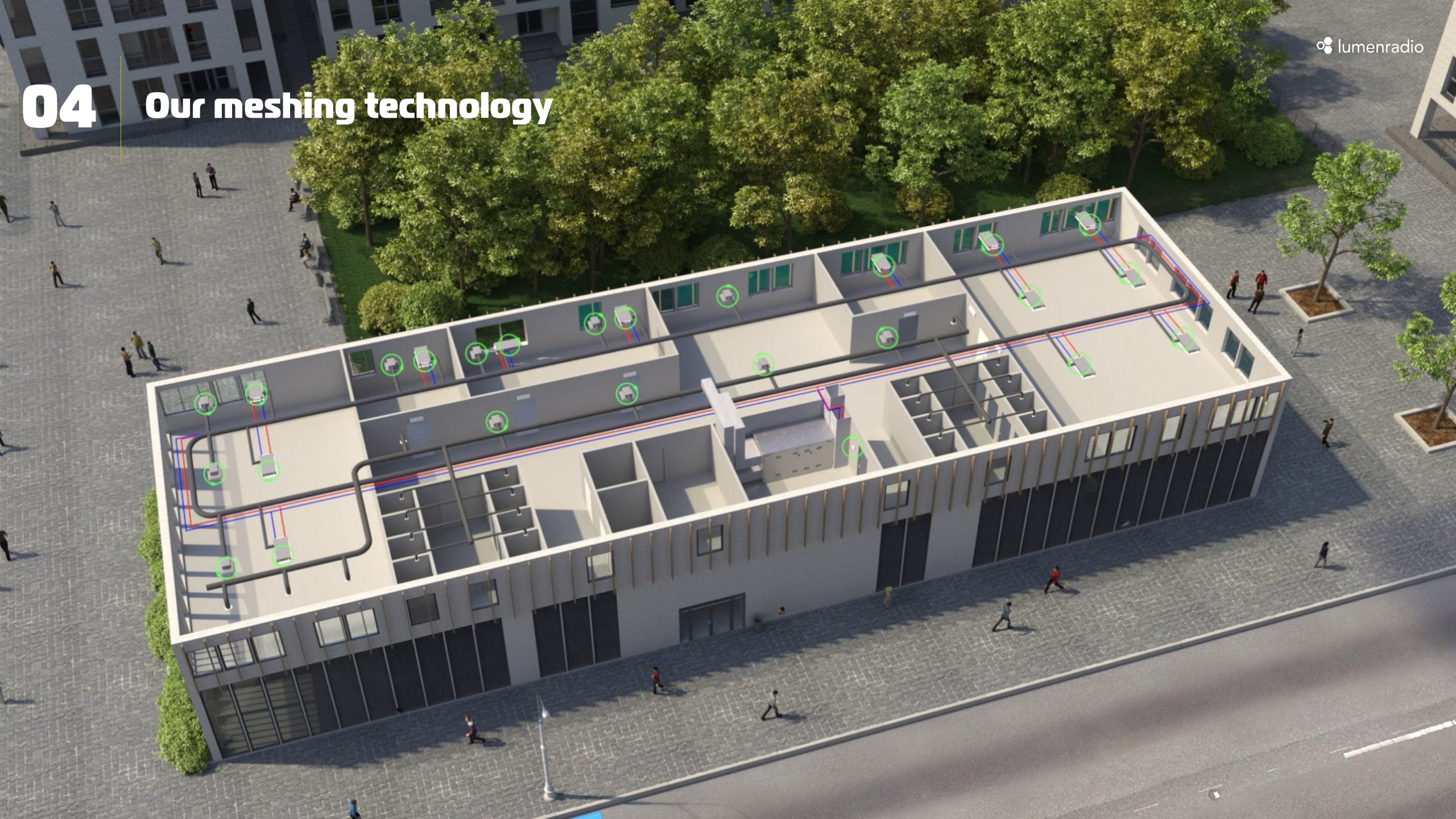
Frequencies are limited – as more wireless IoT devices are added, the frequency spectrum will get more congested, making wireless products have degraded quality of service or even stop working completely

04 Cognitive Coexistence



Patented technology that predicts on a millisecond basis how the frequency spectrum will be utilized going forward and uses this to adapt to the best available and least congested frequencies.

04 Our meshing technology



04

Trusted by

Honeywell

Swegon

pd PRODUAL
measure-be sure.

PROLON

TROX

ebmpapst

 **Munters**

SKF

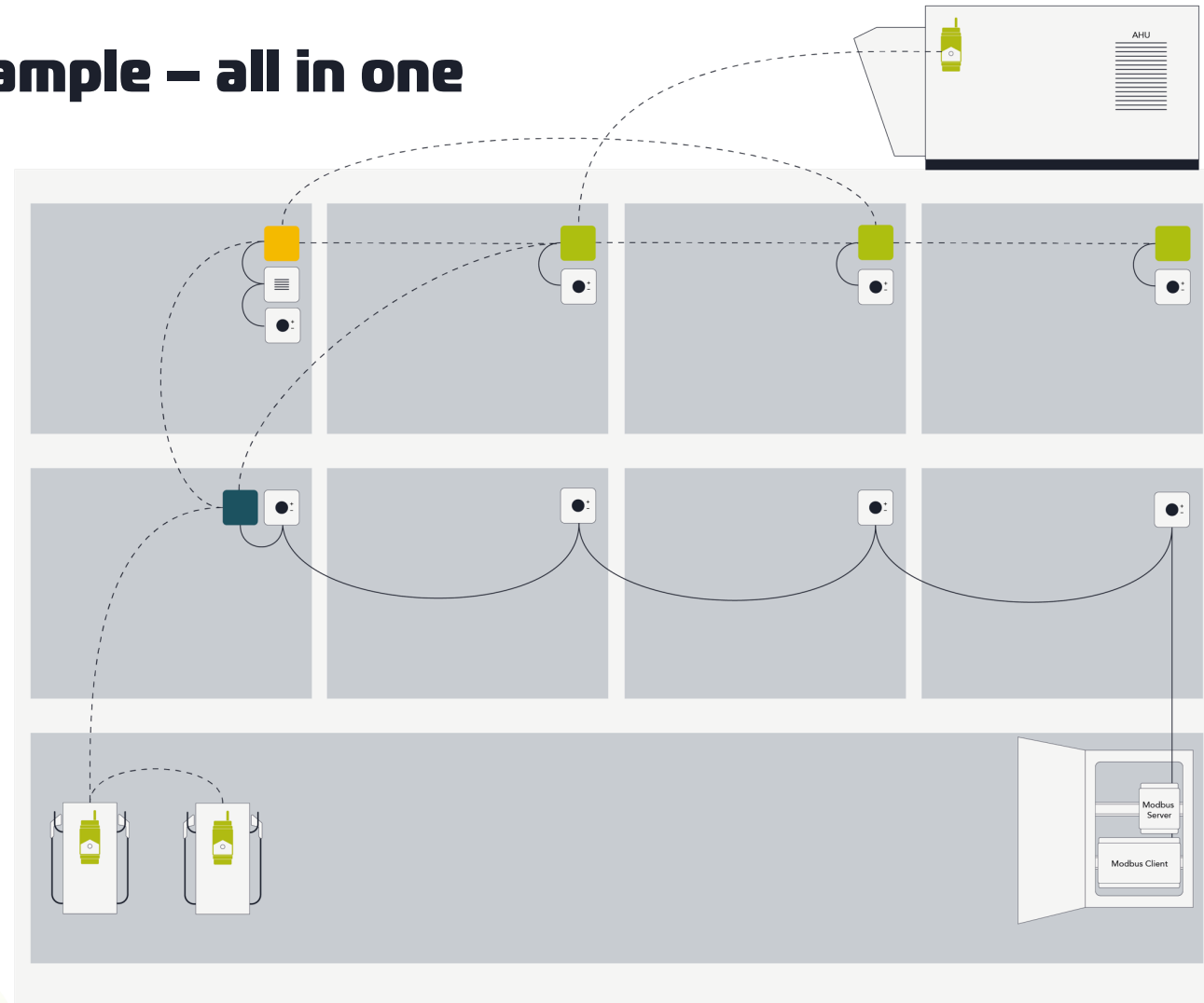
 systemair


Absolent

 **SAUTER**
Für Lebensräume mit Zukunft.

ERTEK

04 Application example – all in one



04 Our products replace the cable



Checklist



05 What makes for a quick and easy wireless installation?

QUESTIONS ABOUT THE CONTROL NETWORK

- How many units?
- How close together?

QUESTIONS ABOUT THE LOCATION

- Indoors or outdoors?
- What is the control cabinet made of?
- Expected range?
- What are the walls made of?

You can also verify your installation with our free mobile app for Android and iOS

After the webinar, you'll get a full checklist in a handy PDF.

05 LumenRadio Evaluation kit



840-2200 W-BACnet
840-2100 W-Modbus

€ 400 - Try it today!

A background image showing a technician in a dark shirt smiling while working on a piece of equipment. The scene is dimly lit, with various cables and components visible in the background.

Thank you!

FOR EVERY CABLED INSTALLATION, WE BELIEVE THERE IS A WINNING
WIRELESS SOLUTION, POTENTIALLY YET TO BE EXPLORED.

[#WirelessWithoutWorries](#)



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